

41

NEC

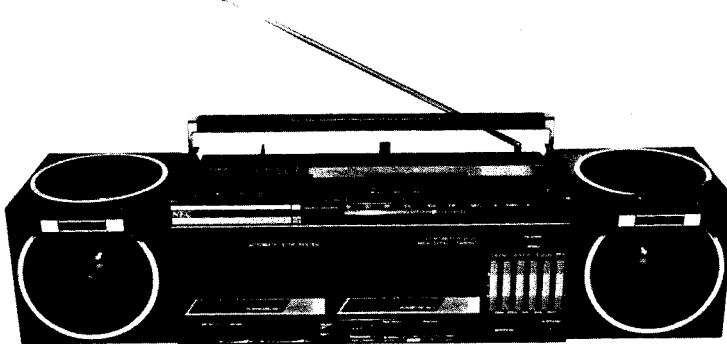
Authentic series
PORTABLE COMPONENT STEREO
SERVICE MANUAL

MODEL RM-2670E(BD)
RM-2670E(BA)

ORDER NO. 499-91-0331



Better Service
Better Reputation
Better Profit



SPECIFICATIONS

POWER SUPPLY

Mains AC 220V, 50Hz(BD) AC 240V, 50Hz(BA)
Batteries DC 9V, "C" size or UM-2 flashlight batteries x 6

POWER CONSUMPTION 12W

POWER OUTPUT 4.4W total (maximum)

SPEAKERS 92mm, 4 ohms, dynamic (x 4) 20mm, piezo, (x 2)

DIMENSIONS 594(W) x 135(H) x 150(D) mm

WEIGHT 3.5kg (without batteries)

RADIO SECTION

Tuning Range FM : 87.5 - 108 MHz
MW : 530 - 1605 kHz
SW : 5.8 - 18.5 MHz
(51.7 - 16.2 m)

Antenna System FM : Telescopic antenna
MW/SW : Built-in ferrite bar antenna

FM Stereo Separation 30 dB (at 1kHz)

STEREO CASSETTE RECORDER SECTION

Type 4-track, 2-channel stereo or monaural
double recording

Tape Speed 4.75 cm/sec.

Rewind Time 180 sec. (approx.) with C60 cassette tape

Wow and Flutter 0.3% (WRMS)

Frequency Response 100 - 8000 Hz (normal)

JACKS

External Microphone 0.5mV/15kohm

AUX 100mV/47kohm

Mix. Microphone 0.4mV/3.3kohm

Headphone 32 ohm

Specifications may be changed without notice.

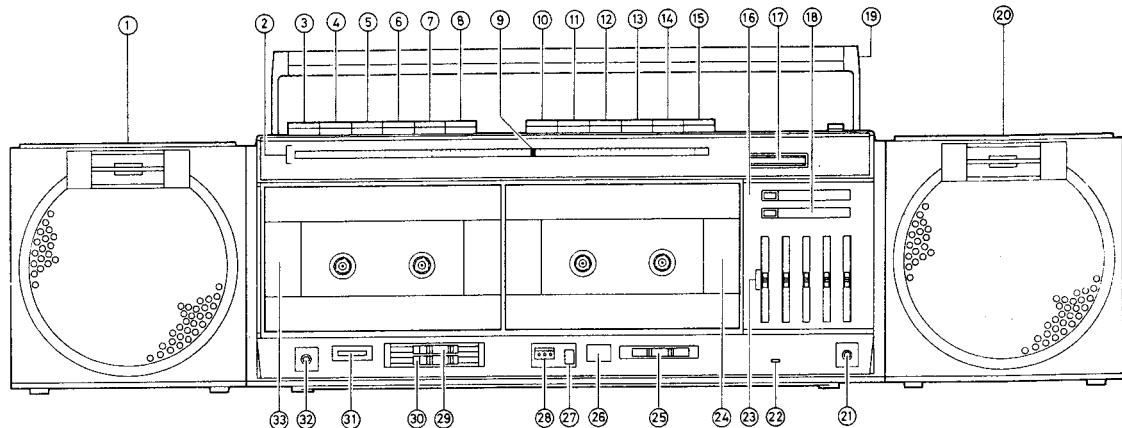
NEC Corporation

TOKYO, JAPAN

41

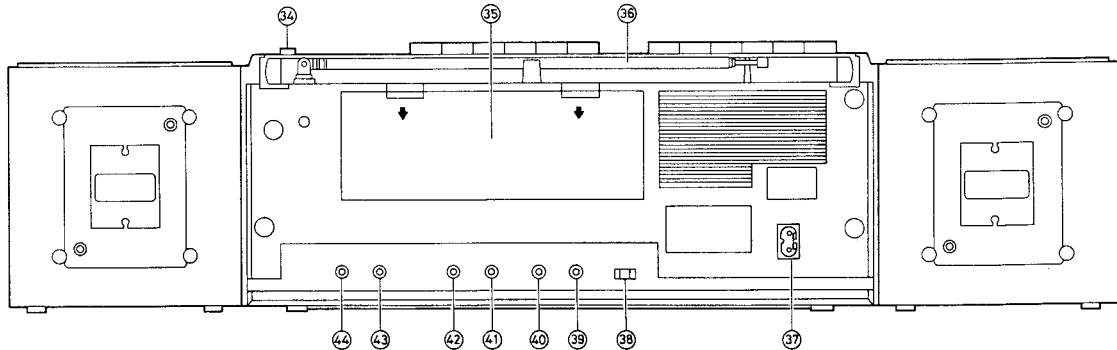
COMPONENTS

FRONT VIEW



1. Left Channel Speaker Box	18. Power/Battery Indicator
2. Radio Dial	19. Handle
3. Pause Button (Cassette 1)	20. Right Channel Speaker Box
4. Stop/Eject Button (Cassette 1)	21. Headphone Jack
5. Fast-Forward Button (Cassette 1)	22. Built-in Microphone
6. Rewind Button (Cassette 1)	23. Graphic Equalizer Control Knob
7. Playback Button (Cassette 1)	24. Cassette Compartment Cover (Cassette 2)
8. Record Button (Cassette 1)	25. Function Knob
9. Dial Pointer	26. Tape Speed Select Knob
10. Pause Button (Cassette 2)	27. Tape Counter Reset Button
11. Stop/Eject Button (Cassette 2)	28. Tape Counter
12. Fast-Forward Button (Cassette 2)	29. Left Channel Volume Control Knob
13. Rewind Button (Cassette 2)	30. Right Channel Volume Control Knob
14. Playback Button (Cassette 2)	31. Mic Mix Volume Control Knob
15. Record Button (Cassette 2)	32. Mic Mix Jack
16. FM Stereo Indicator	33. Cassette Compartment Cover (Cassette 1)
17. Tuning Knob	

REAR VIEW

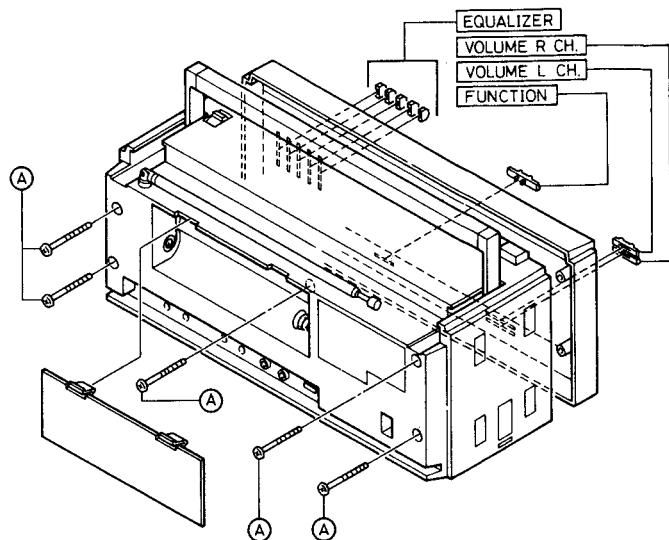


34. Band Select Knob	40. Right Channel AUX IN Jack
35. Battery Compartment Cover	41. Left Channel Microphone Jack
36. Telescopic Antenna	42. Right Channel Microphone Jack
37. AC Power Cord Connection Socket	43. Left Channel Speaker Jack
38. Beat Cancel	44. Right Channel Speaker Jack
39. Left Channel AUX IN Jack	

DISASSEMBLY

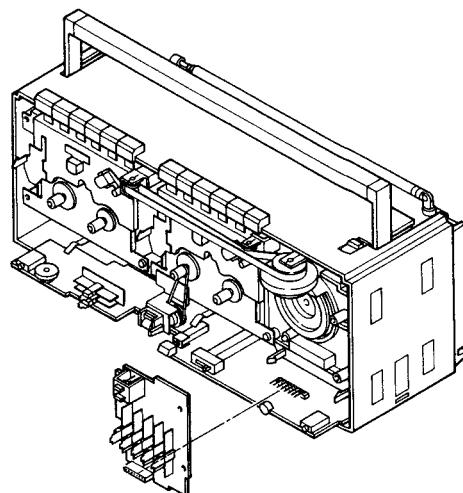
FRONT CABINET REMOVAL

1. Open the Compartment Lids by pressing the Stop/Eject Buttons and remove the cassette tapes from the compartments.
2. Remove the Battery Compartment Lid. Then remove the batteries.
3. Remove the eight Knobs (volume L ch, R ch, function and five equalizer).
4. Remove the five screws **(A)** fastening the Rear Cabinet.
5. Open the Cassette Compartment Lids by pressing the Stop/Eject Buttons and pull out the Front Cabinet away from the unit.
6. Reassembly in the reverse order.



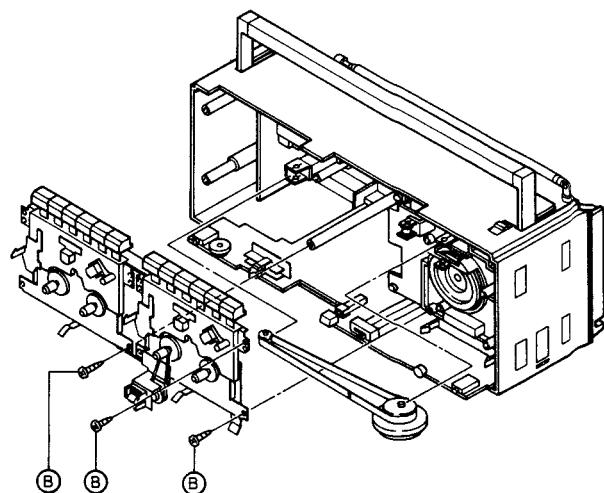
EQUALIZER PC BOARD REMOVAL

1. Follow the instructions "Front Cabinet Removal".
2. Remove the Equalizer PC Board completely, disconnect one connector (connector 6) from Tape PC Board.



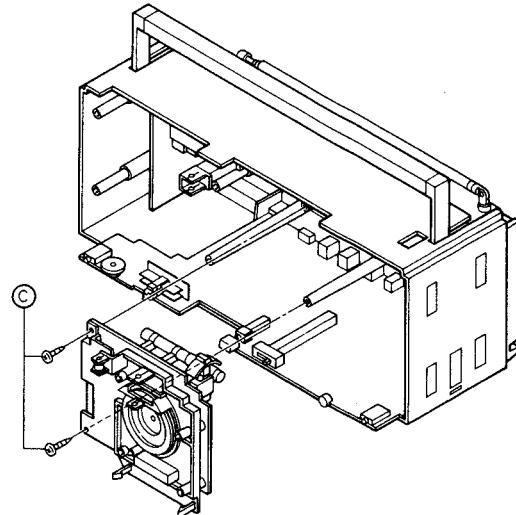
CASSETTE MECHANISM REMOVAL

1. Follow the instructions "Front Cabinet and Equalizer PC Board Removal".
2. Remove the Tuning Knob, Pointer Belt and Pulley.
3. Remove the three screws **(B)**.
4. To remove the Cassette Mechanism, disconnect three lead wire connectors (connector 3, connector 4 and connector 5) from Tape PC Board.



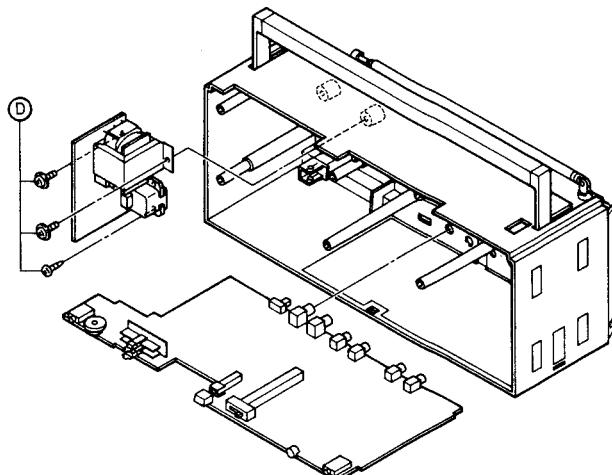
RADIO CHASSIS REMOVAL

1. Follow the instructions "Front Cabinet, Equalizer PC Board and Cassette Mechanism Removal".
2. Remove the two screws **C**.
3. To remove Radio Chassis, disconnect one lead wire connector (connector 1) from Tape PC Board, and disconnect telescopic antenna lead wire (white) from Radio PC Board.



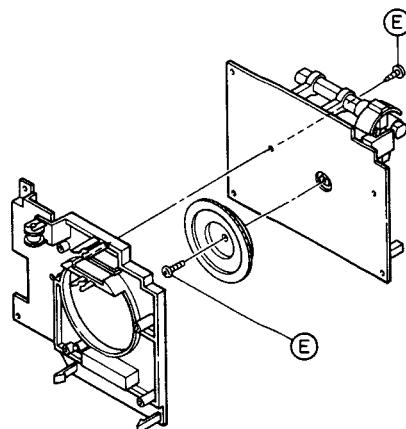
TAPE PC BOARD AND POWER SUPPLY PC BOARD REMOVAL

1. Follow the instructions "Front Cabinet, Equalizer PC Board, Cassette Mechanism and Radio Chassis Removal".
2. Remove the three screws **D**. Pull out the Power Supply PC Board away from the Rear Cabinet, and disconnect one lead wire connector (connector 2) from Tape PC Board.
3. Pull out the Tape PC Board.



RADIO PC BOARD REMOVAL

1. Follow the instructions "Front Cabinet, Equalizer PC Board, Cassette Mechanism and Radio Chassis Removal".
2. Remove the two screws **E**.
3. Pull out the Radio Chassis and Tuning Gear.



MECHANISM ADJUSTMENT

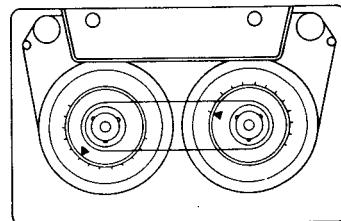
WINDING TORQUE ADJUSTMENT

1. Insert a cassette torque meter and measure in each mode.

Play, FF and Rewind, measure at the end of the tape when the tape has stopped running.

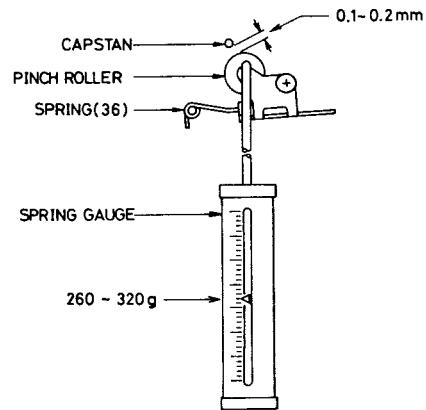
Take-up Torque: 35 to 60g/cm
 Fast-Forward Torque: 50 to 120g/cm
 Rewind Torque: 50 to 120g/cm

2. If the winding torque is not adequate, wipe the Flywheel (43 and 44), Riwind/FF Pulley Arm Ass'y (39), and/or replace the Rewind/FF Belt (42).



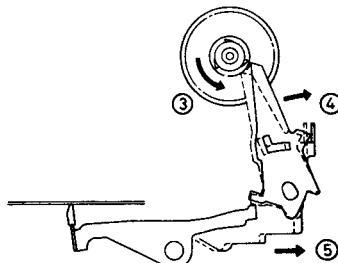
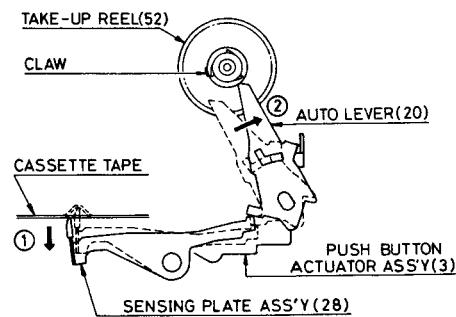
PINCH ROLLER ADJUSTMENT

1. While keeping the unit in the playback mode, measure the Pinch Roller contact with a Spring Gauge (0 to 500 g gauge).
 A Pinch Roller force to 260 to 320 g is required.
2. Hook the Spring Gauge to the Pinch Roller and pull it away from the Capstan.
 Moment when the Pinch Roller comes in contact with the Capstan (when the Pinch Roller starts re-volving).
3. To adjust the contact pressure, bend the Pinch Roller Spring (36), and/or replace Pinch Roller Spring.



CHECKING OPERATION OF AUTO STOP

1. When the tape comes to the end, Sensing Plate Ass'y (28) begins to move due to tape tension and induces Auto Lever (20) action.
 The auto lever is operated by contact with a Claw on the Take-up Reel (52), which releases the Push Button Actuator (3).
2. Confirm that Sensing Plate Ass'y and Auto Lever move smoothly as you move the Sensing Plate Ass'y in playback mode.



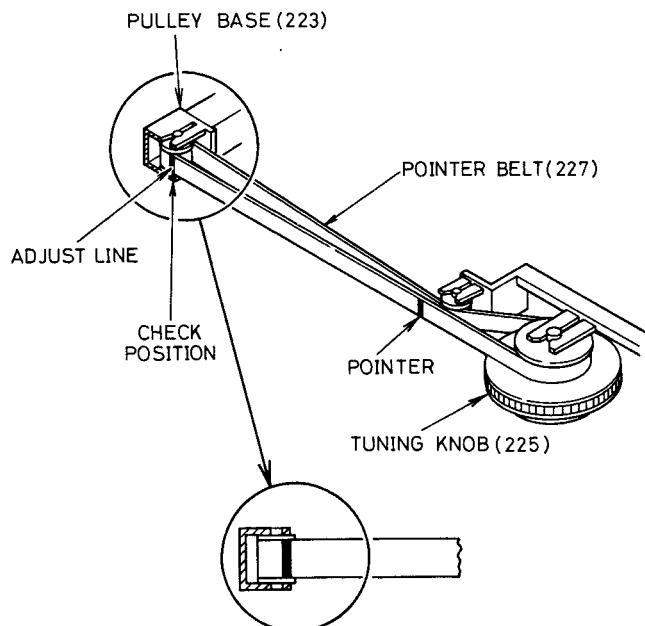
DIAL POINT SETTING

If the Tuning Gear (406) has been removed for some reason, it must be reinstalled properly following the steps below before installation of the Tuning Knob (225), the Pointer Belt (227), and the Pointer Belt Pulley (222).

1. Turn the tuning capacitor shaft counterclockwise until it stops.
2. Mount the Tuning Gear (406) on the tuning capacitor shaft so that the two small nodes on the Tuning Gear are located on the righthand side of the vertical center line of the tuning gear.

To install the Tuning Knob (225), Pointer Belt (227), and Pointer Belt Pulley (222), follow the steps below.

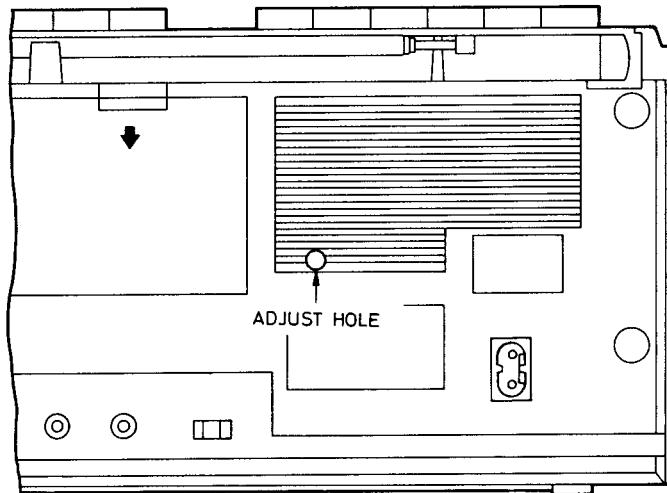
1. Be sure the Tuning Capacitor is in its most counterclockwise position.
2. Put the Pointer Belt (227) on the Pointer Belt Pulley (222), and snap the Pulley in the Pulley Base (223).
3. Position the Pointer Belt so that adjust line on the belt is check position the Pulley Base, and the pointer marking is located near to the right end of the belt. See the illustration above.
4. Keeping the Pointer Belt (227) in the position mentioned above, put the other end of the Pointer Belt on the Tuning Knob (225), and snap the Tuning Knob in its catches making sure the gears are meshed properly.



ELECTRICAL ADJUSTMENT

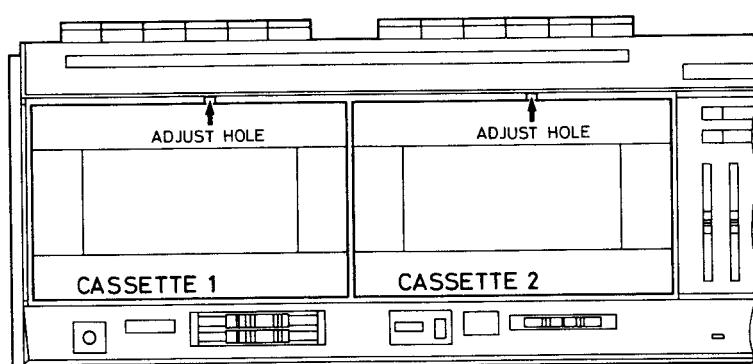
TAPE SPEED ADJUSTMENT

1. Set the Tape speed switch to the normal position.
2. Connect a Frequency Counter to the EXT SP. (L ch) Jack across 4 ohm dummy load.
3. Adjust the potentiometer in the Motor to make the counter reading 3045Hz while playing back (Cassette 1) 3000Hz test tape.



RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT, CASSETTE 1 AND CASSETTE 2

1. Connect a SSVM or Oscilloscope to each of the EXT SP. (L and R ch.) Jack (Dummy load 4 ohm).
2. Playback an 8kHz test tape and turn the Azimuth Adjustment Screw to obtain the maximum output of the left and right channels.
3. When the output level of the left and right channels differs, readjust to make the both channels at the same level.
4. After adjustment, remove the Up Case and secure the screws with paint or glue.

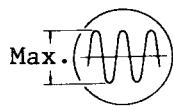


TUNER ALIGNMENT PROCEDURES

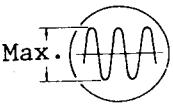
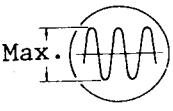
Equipment required

1. AM S. G.
2. Loop Antenna
3. Voltmeter (SSVM)
4. Scope
5. Counter
6. FM S. G.
7. Dummy load 300k-ohm, 32-ohm

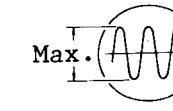
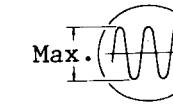
AM IF ALIGNMENT (Figures 1 and 7)

Step	Alignment	Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
	IF Calibration	455kHz	Low End	T2 and L4	Obtain sine-wave and maximum amplitude. 

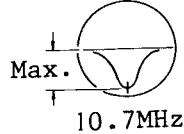
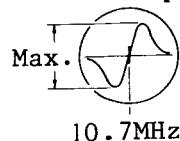
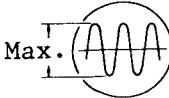
SW ALIGNMENT (Figures 2 and 7)

Step	Alignment	Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
1	Tuning Range Calibration	5.8MHz	Low End	L8	Obtain sine-wave and Maximum amplitude. 
2		18.5MHz	High End	TC5	
3	Adjustment of Tracking	7MHz	7MHz	L6	
4		16MHz	16MHz	TC3	
5	Repeat the above adjustment.				

MW ALIGNMENT (Figures 2 and 7)

Step	Alignment	Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
1	Tuning Range Calibration	515kHz	Low End	L7	Obtain sine-wave and maximum amplitude. 
2		1635kHz	High End	TC6	
3	Adjustment of Tracking	600kHz	600kHz	L5	
4		1400kHz	1400kHz	TC4	
5	Repeat the above adjustment.				

FM ALIGNMENT (Figures 3,4,5 and 7)

Step	Alignment	Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
1				Turn L3 fully counter-clockwise.	
2	IF Calibration	10.7MHz	Low End	T1	Obtain symmetrical curve and maximum amplitude. 
3				L3	Obtain S curve and maximum amplitude. 
4	Tuning Range Calibration	87.5MHz	Low End	L2	Obtain sine-wave and maximum amplitude. 
5		108MHz	High End	TC2	
6	Adjustment of Tracking	90MHz	90MHz	L1	
7		106MHz	106MHz	TC1	
8	Repeat the above adjustments.				

FM STEREO ADJUSTMENT (Figures 6 and 7)

1. Connect a frequency counter with a 300k ohm dummy load to test points TP5 and TP2.
2. Set positions:
 TAPE/RADIO Switch :RADIO position
 BAND SELECTOR Switch :FM STEREO position
3. Adjust VR1 on the Tuner PCB for a frequency counter reading of 38.00kHz $\pm 100\text{Hz}$.

REMARKS:

- 1) When aligning FM IF, the symmetrical curve may not be obtained by setting the marker of the Sweep Generator (10.7MHz). This is due to the ceramic filter used in the unit. Regardless of the marker, align the curve as symmetrically as possible with peak output.
- 2) When aligning the Tuning Range and adjusting the Tracking, proceed with alignment in a sequence of SW \rightarrow MW \rightarrow FM.
- 3) Use a screwdriver with a plastic grip for all alignments.

IF CALIBRATION, AM

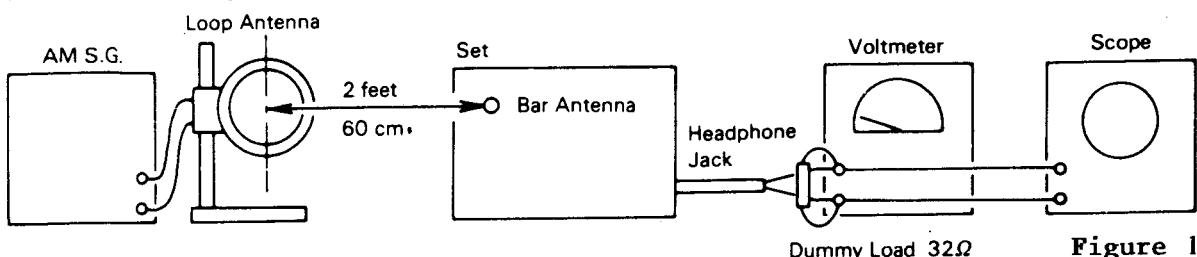


Figure 1

TUNING RANGE CALIBRATION

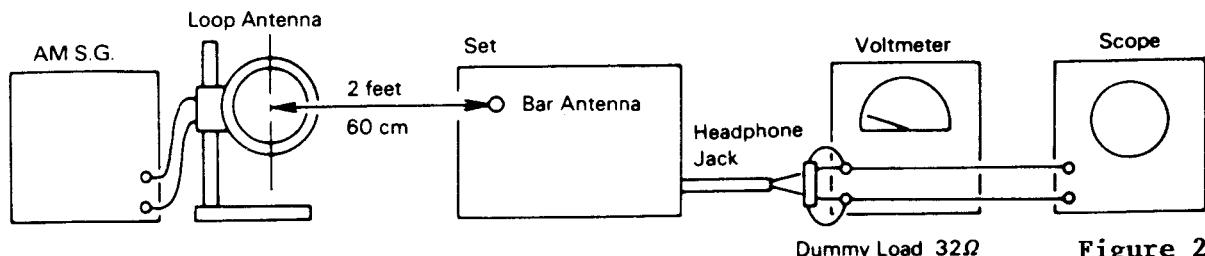


Figure 2

IF CALIBRATION, FM

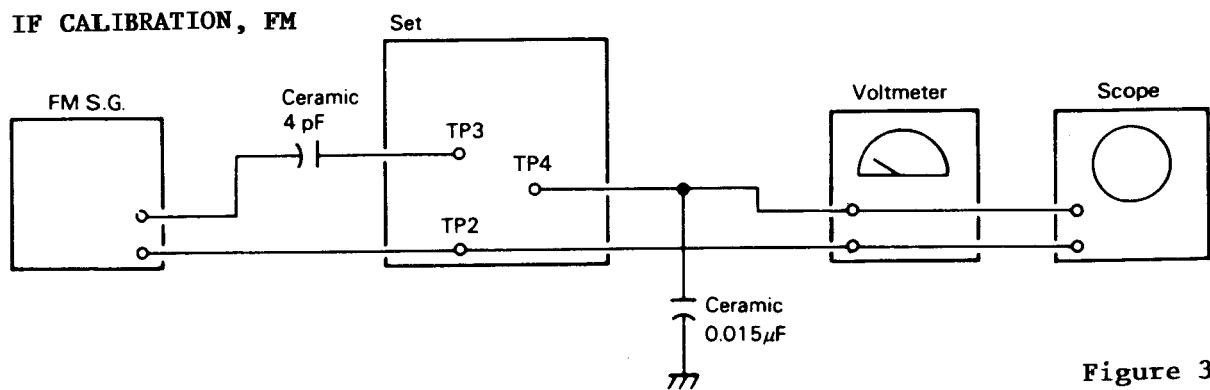


Figure 3

TUNING RANGE CALIBRATION, FM

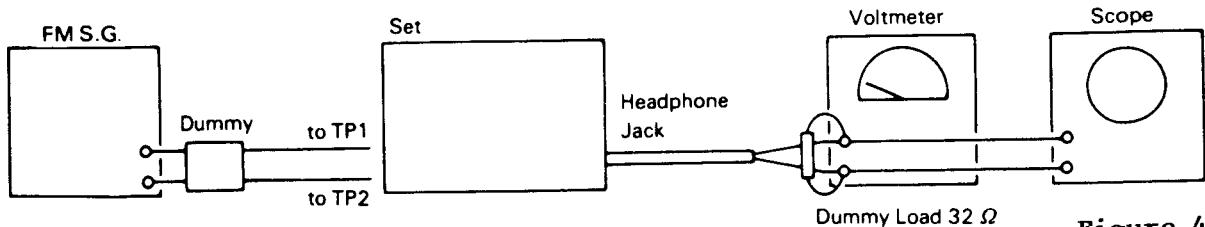
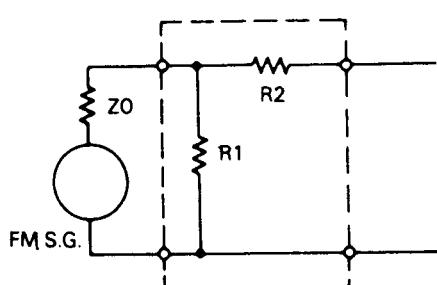


Figure 4



$R_1 = Z_0$ $Z_0 = \text{Output impedance of SG}$
 $R_2 = 75\Omega - Z_0 / 2$

Figure 5

FM STEREO ADJUSTMENT

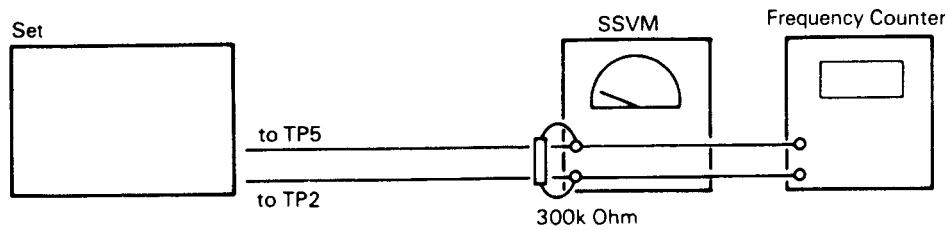


Figure 6

TUNER PCB PARTS LOCATION, TOP

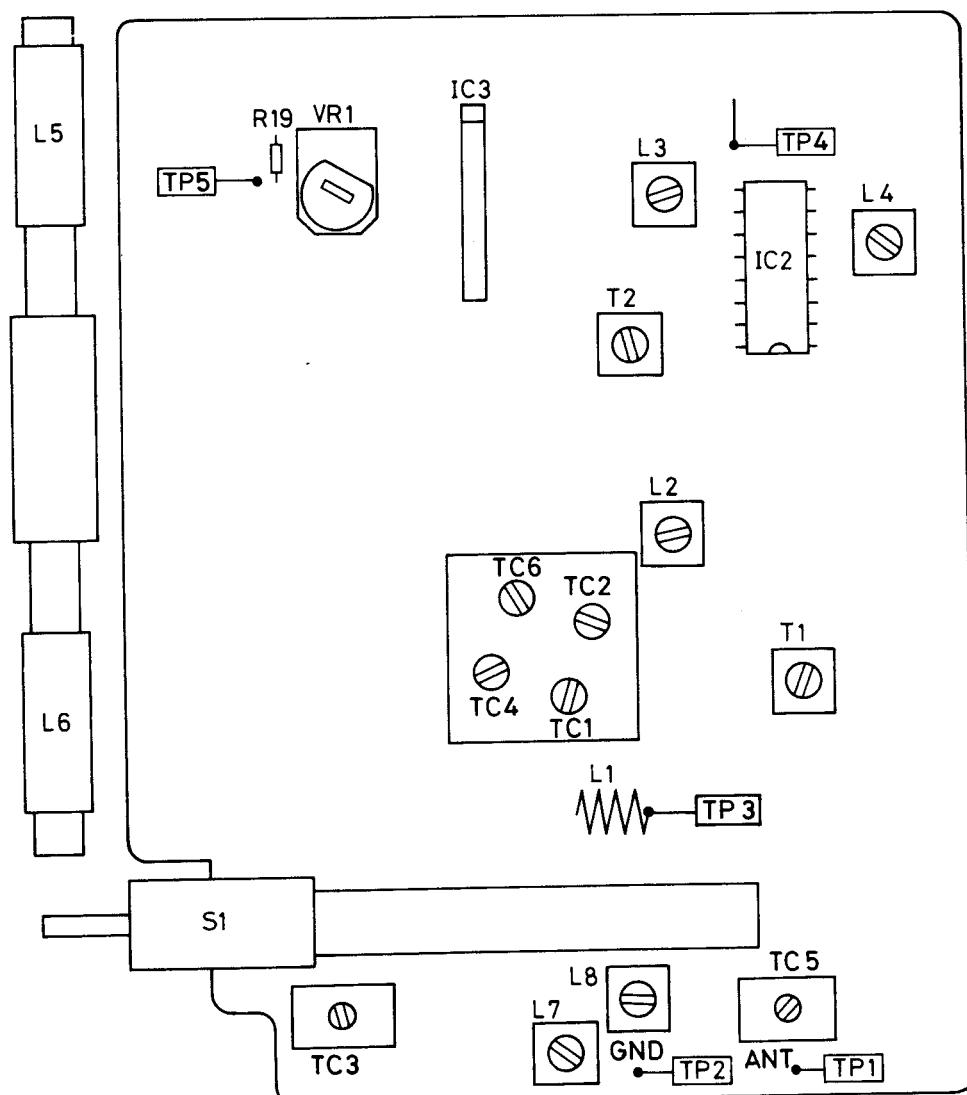
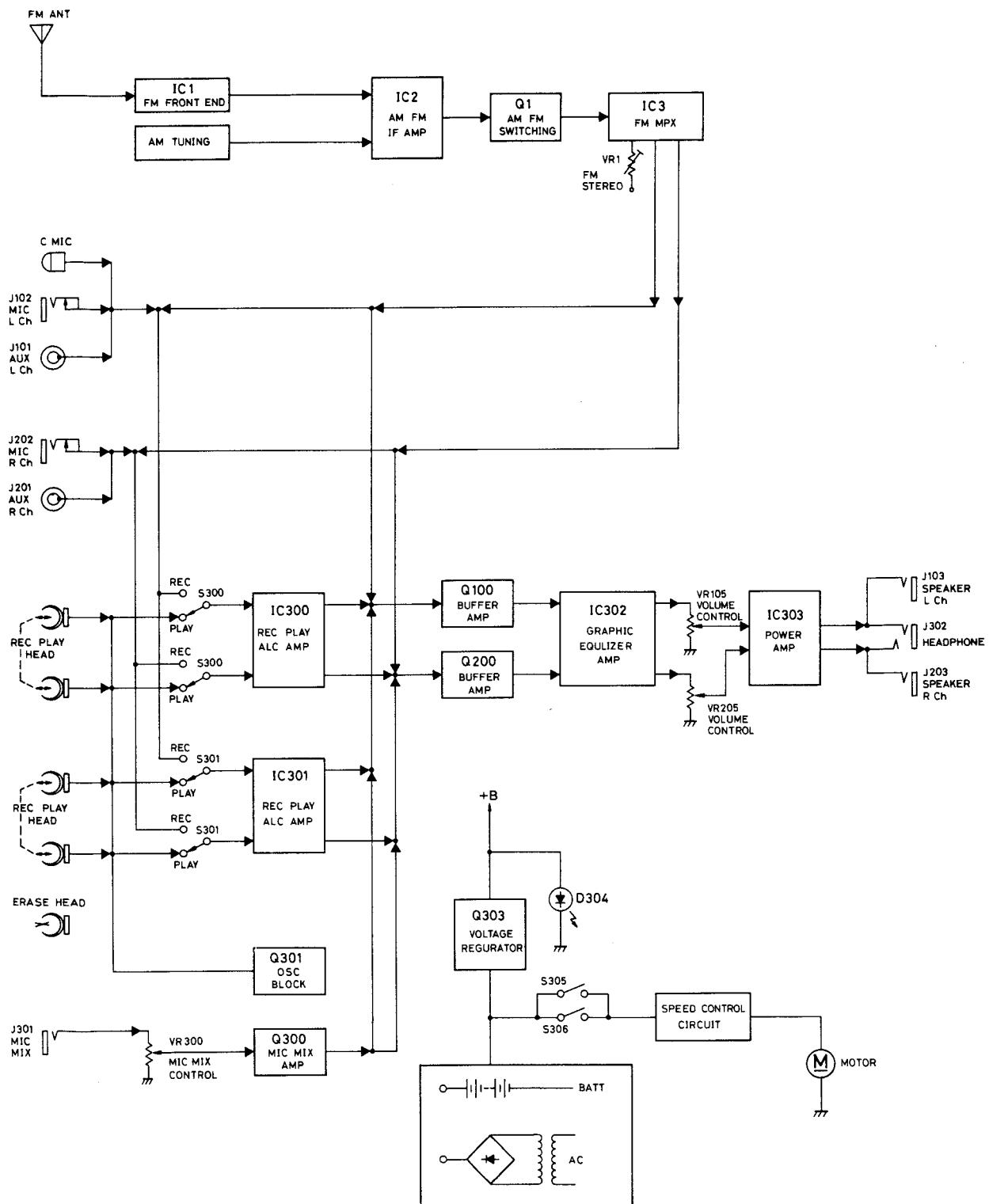
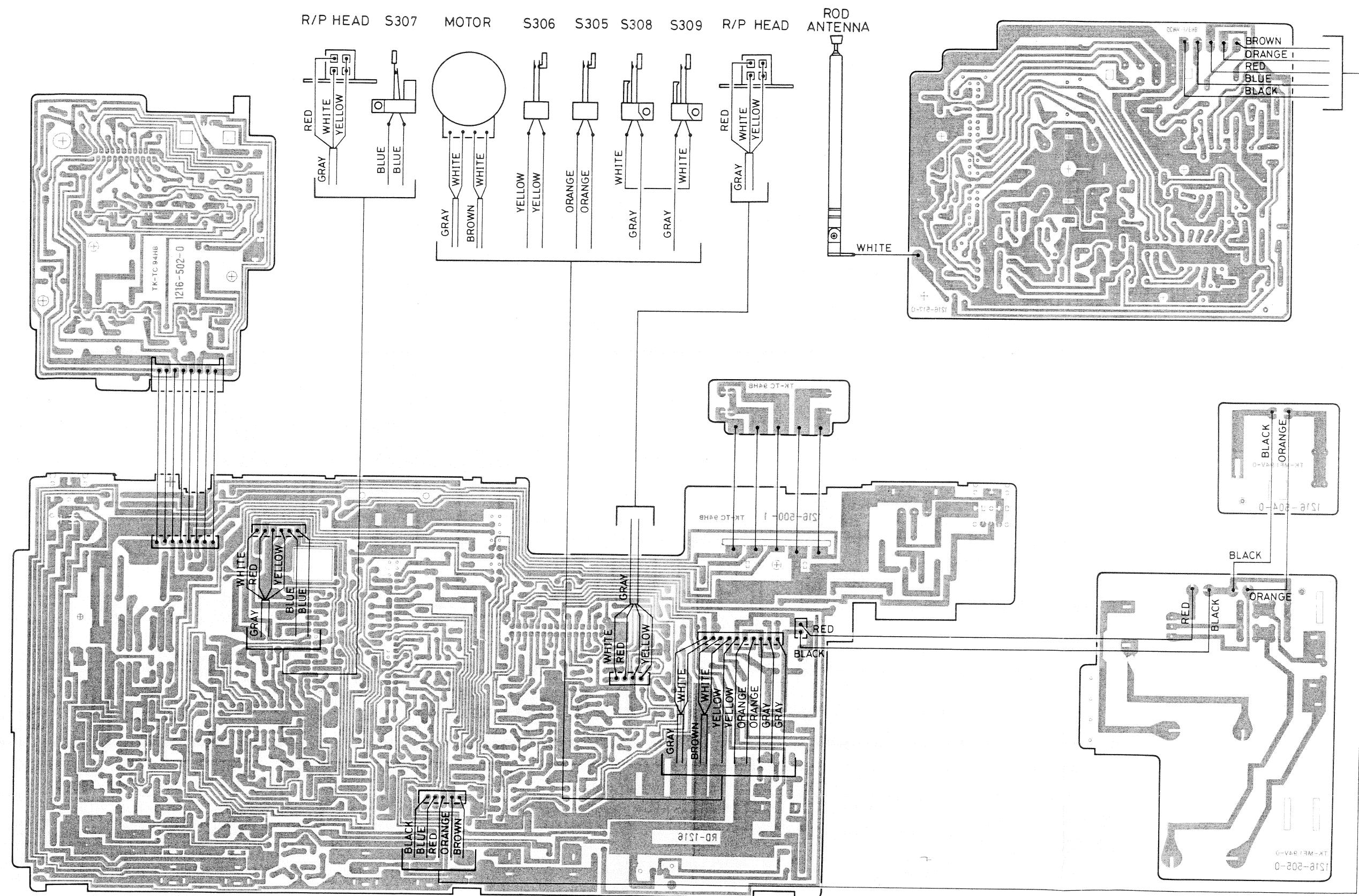


Figure 7

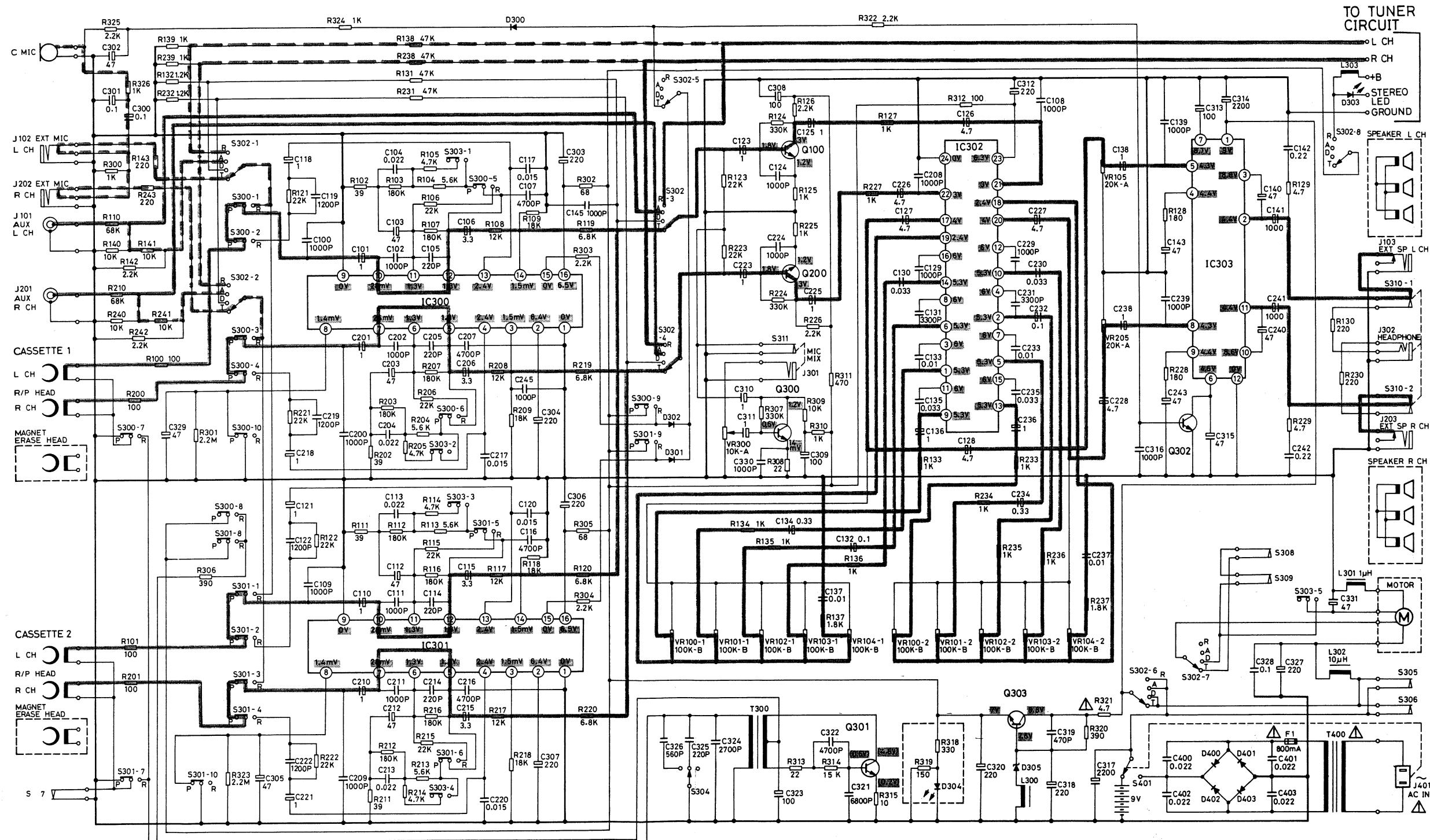
BLOCK DIAGRAM



WIRING DIAGRAM



AMPLIFIER SCHEMATIC DIAGRAM



IC300,301-----TA7668BP

IC302-----BA382L

IC303-----BA5406

Q100,200,300~302---2SC458-D,2SC1815-GR,
2SC945-Por2SC1685-S
Q303-----2SD467-C

D300 ~302-----1S1588,1N4148

or DS447

D303,304-----TLR208

D305-----RD8.2EB1orGZA7.5Z

D400 ~403-----1N4001,1N4003

or SM-1A-02

VOLTAGE CHECK POSITION

V-----PLAYBACK POSITION

(_)-----RECORDING POSITION

S300---CASSETTE 1 RECORD/PLAYBACK SWITCH(PLAYBACK POSITION)

S301---CASSETTE 2 RECORD/PLAYBACK SWITCH(PLAYBACK POSITION)

S302---TAPE/DUBBING/AUX/RADIO SWITCH(TAPE POSITION)

S303---SPEED CONTROL SWITCH(NORMAL POSITION)

S304---BEAT CANCEL SWITCH

S305---CASSETTE 1 TAPE ON/OFF SWITCH(OFF POSITION)

S306---CASSETTE 2 TAPE ON/OFF SWITCH(OFF POSITION)

S307---CASSETTE 2 BIAS MUTING SWITCH

S308---CASSETTE 1 SPEED CONTROL SWITCH(NORMAL POSITION)

S309---CASSETTE 2 SPEED CONTROL SWITCH(NORMAL POSITION)

S310---SPEAKER/HEADPHONE SWITCH(SPEAKER POSITION)

S311---MIC MIX SWITCH(OFF POSITION)

S401---AC/DC SWITCH(DC POSITION)

NOTES:

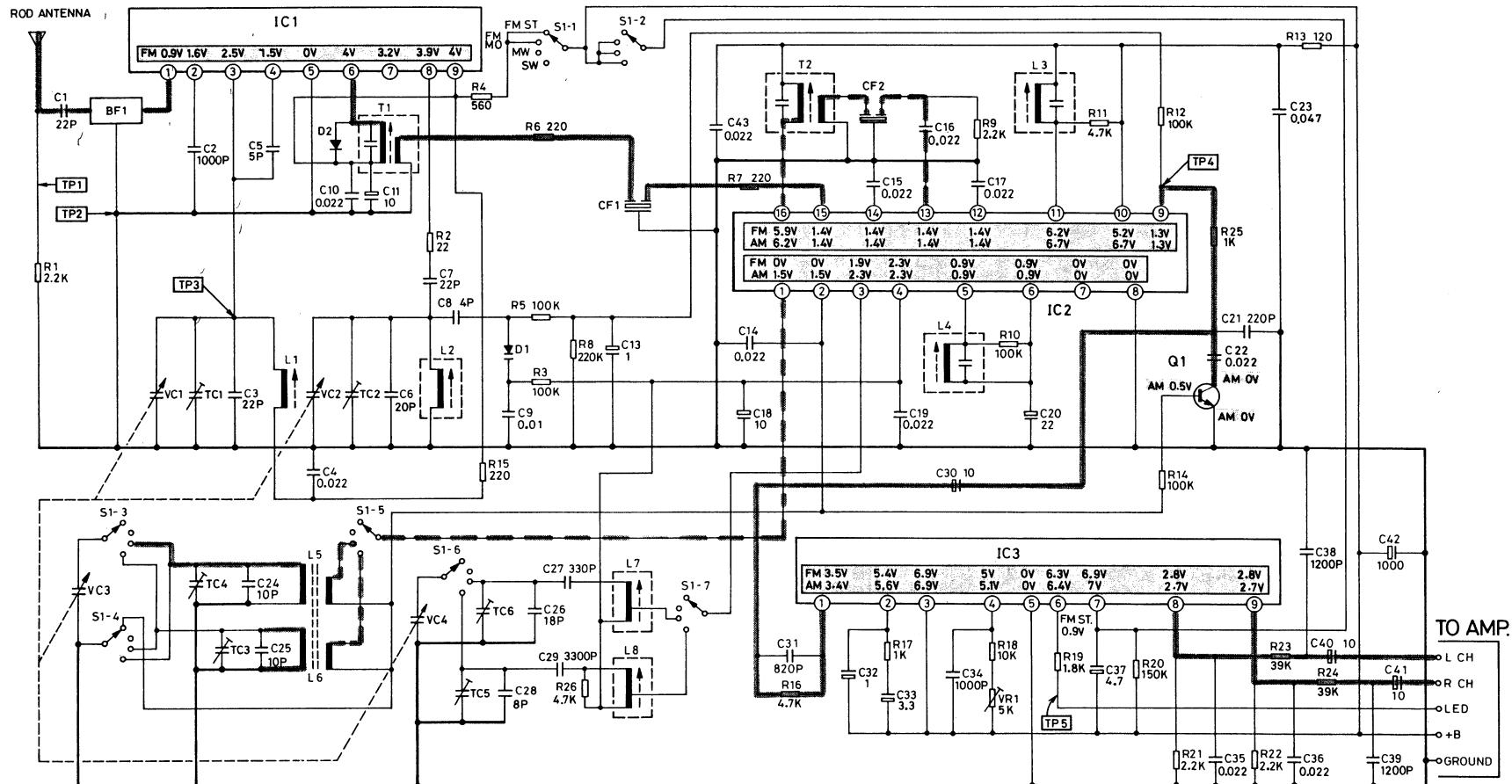
1. ALL RESISTANCE VALUES ARE IN Ω . K=1000 Ω M=1000K Ω

2. ALL CAPACITANCE VALUES ARE IN μF . P=10 6 μF

3. ALL RESISTORS ARE 1/6 WATT, UNLESS OTHERWISE SPECIFIED.

4. VOLTAGES MEASURED FROM POINT INDICATOR TO CHASSIS GROUND
WITH V.T.V.M AT LINE VOLUME CONTROL MINIMUM AND NO SIGNAL.
(SPECIFICATIONS AND CIRCUITS SUBJECT TO CHANGE WITHOUT NOTICE
FOR IMPROVEMENT.)

TUNER SCHEMATIC DIAGRAM



IC1 ----- TA7358P
IC2 ----- TA7640AP
IC3 ----- TA7343P

Q1 ----- 2SC945-P
D1 ----- SD115
D2 ----- HV80
D3 ----- RD8.2EB1

S1---FM STEREO/FM MONO/MW/SW SWITCH (FM STEREO POSITION)

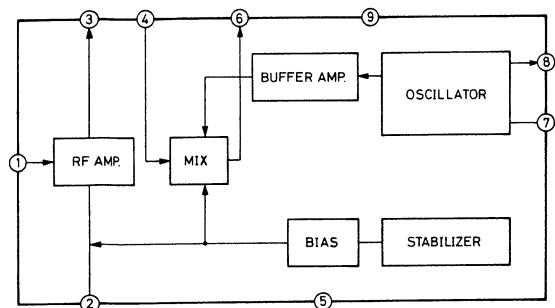
1216-491-0

NOTES:

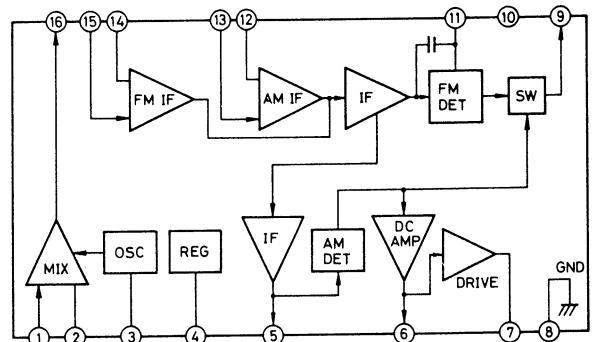
1. ALL RESISTANCE VALUES ARE IN Ω . K=1000 Ω M=1000K Ω
2. ALL CAPACITANCE VALUES ARE IN μF . P=10⁶ μF
3. ALL RESISTORS ARE 1/6 WATT, UNLESS OTHERWISE SPECIFIED.
4. VOLTAGES MEASURED FROM POINT INDICATOR TO CHASSIS GROUND WITH V.T.V.M AT LINE VOLUME CONTROL MINIMUM AND NO SIGNAL (SPECIFICATIONS AND CIRCUITS SUBJECT TO CHANGE WITHOUT NOTICE FOR IMPROVEMENT.)

IC BLOCK DIAGRAM

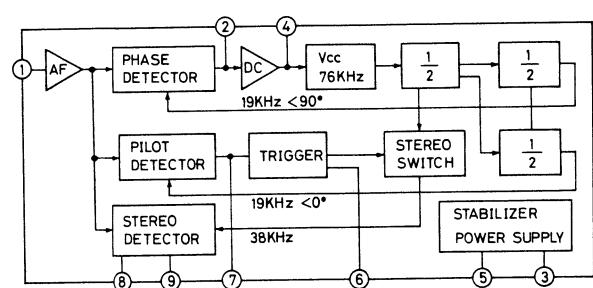
IC1 TA7358P



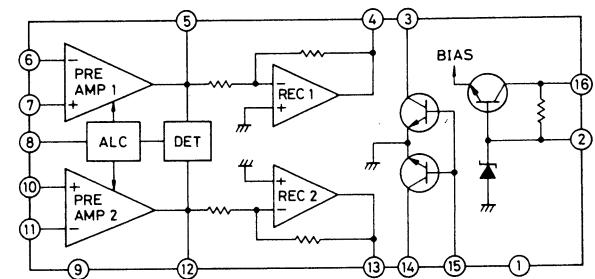
IC2 TA7640AP



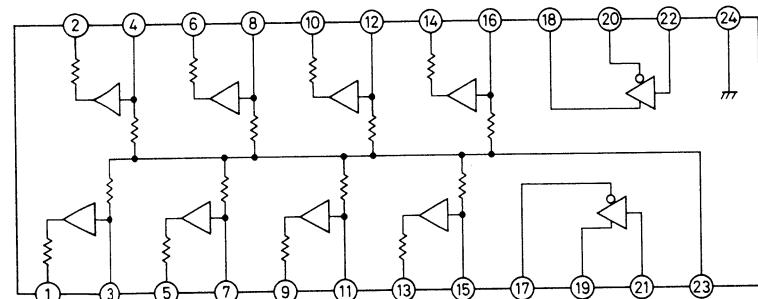
IC3 TA7343P



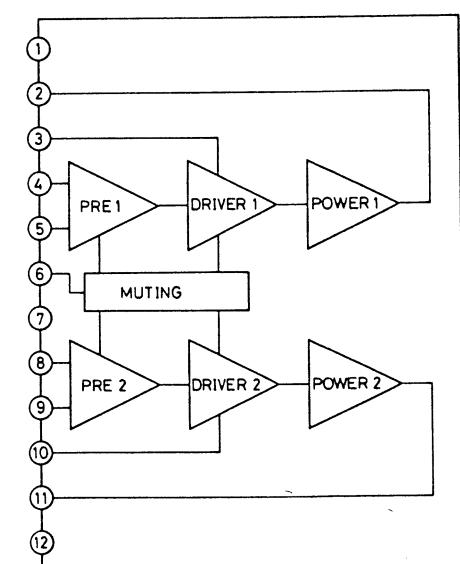
IC300, IC301 TA7668BP



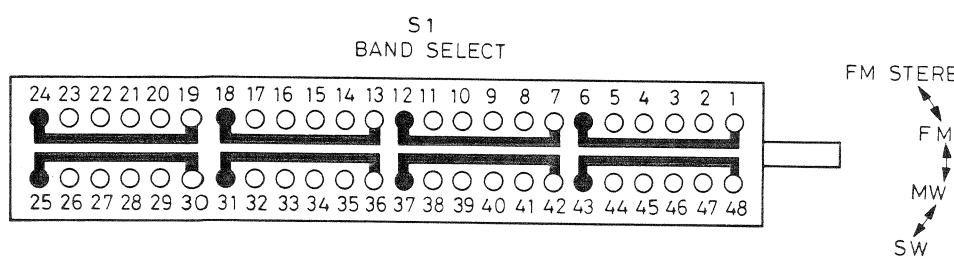
IC302 BA3822L



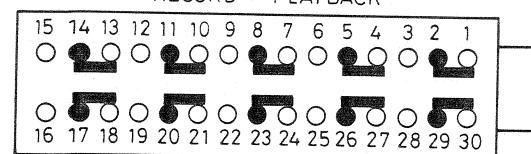
IC303 BA5406



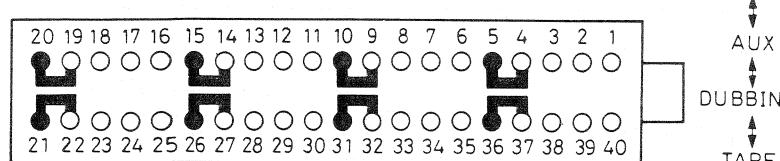
SWITCH CONNECTION VIEW(BOTTOM VIEW)



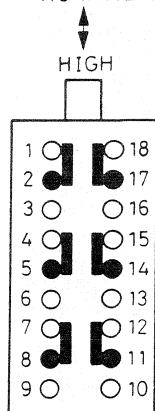
S300, 301
REC/PLAY
RECORD ↔ PLAY BACK



S302
FUNCTION

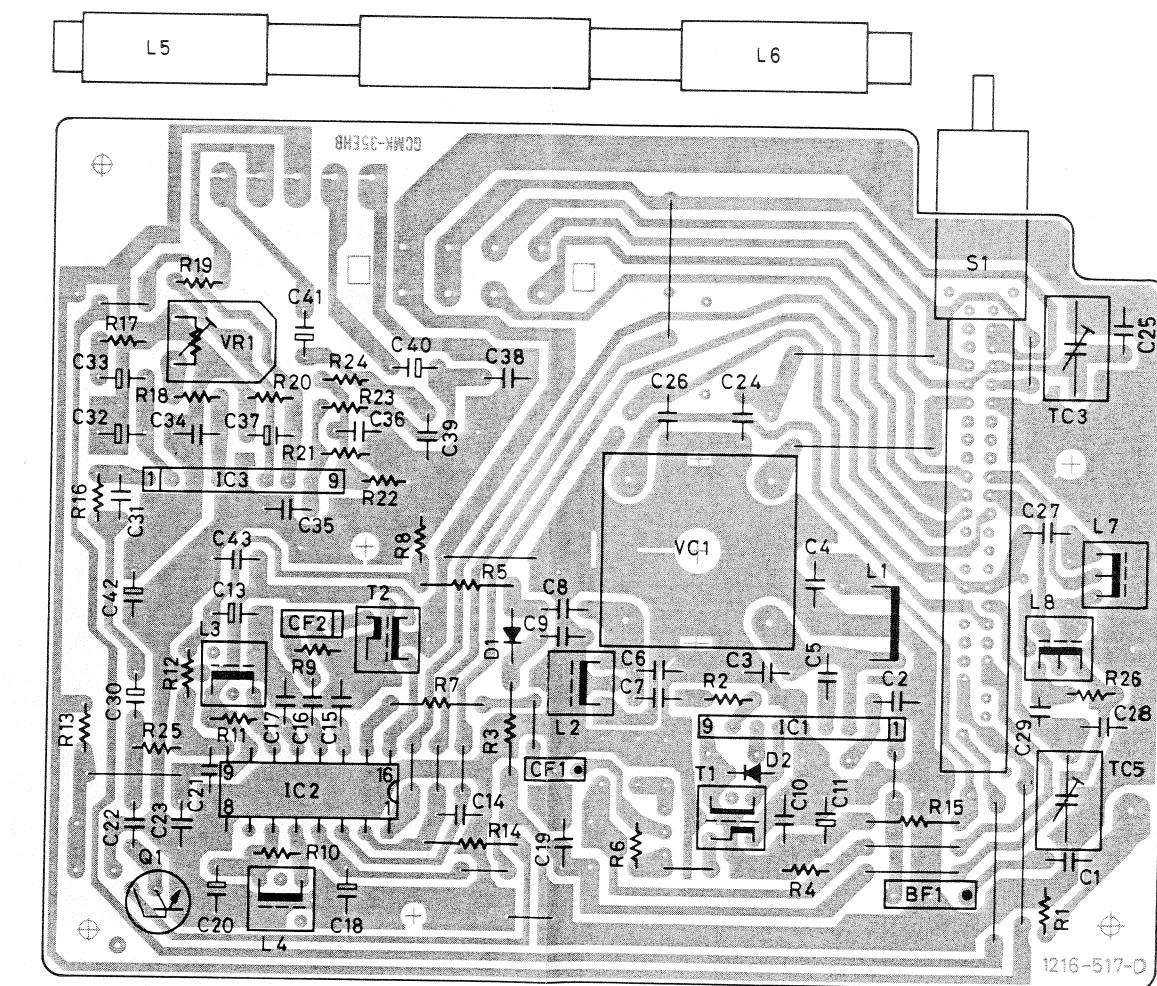


S303
TAPE SPEED
NORMAL



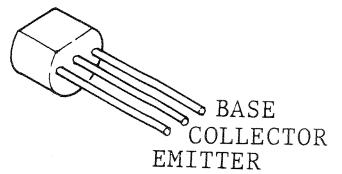
S304
BEAT CUT

TUNER P.C. BOARD

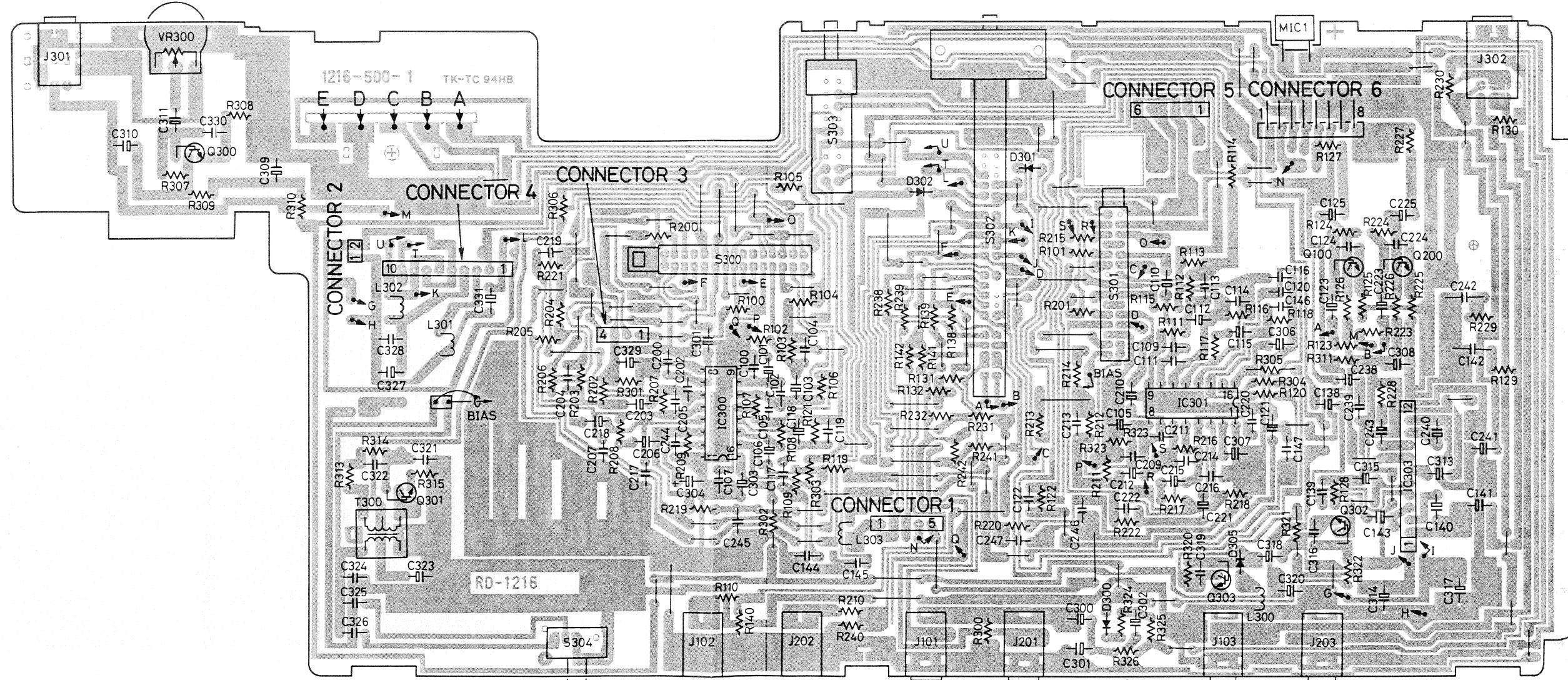


TRANSISTOR VIEW

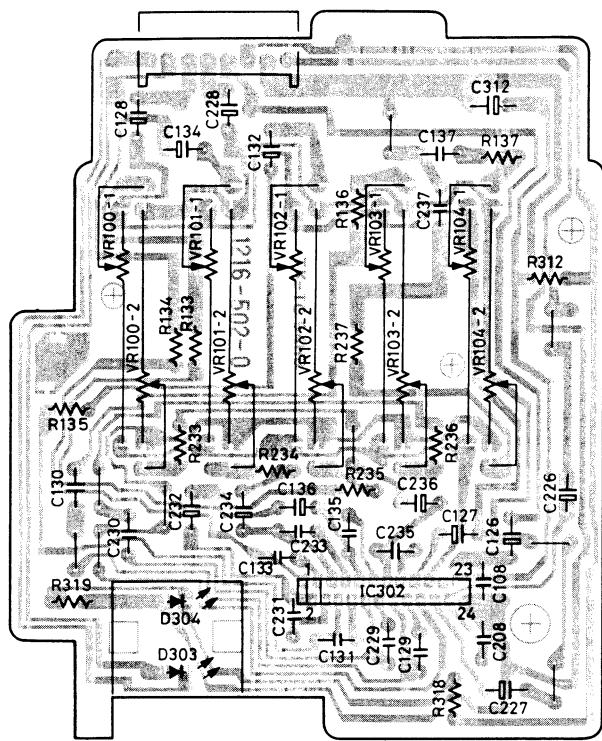
Q1, Q100, Q200, Q300, Q301, Q302, Q303



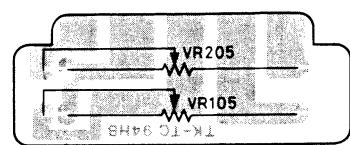
AMPLIFIER P.C. BOARD



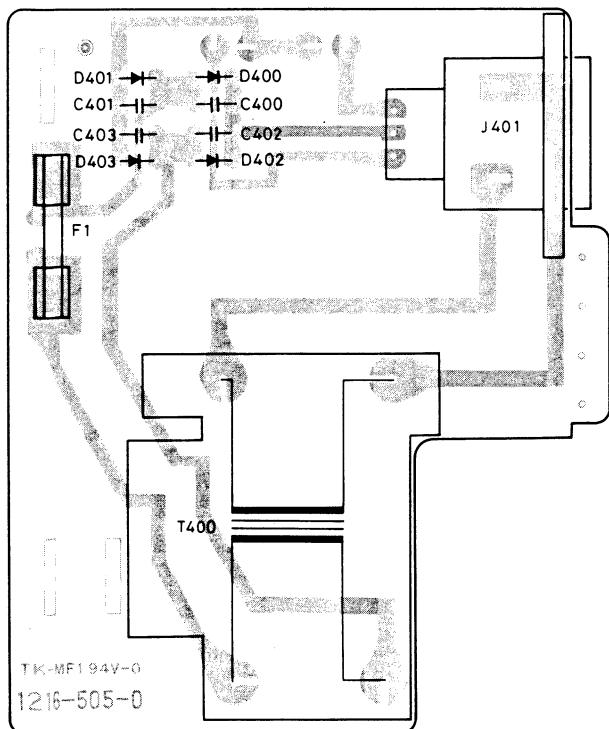
EQUALIZER VOLUME P.C. BOARD



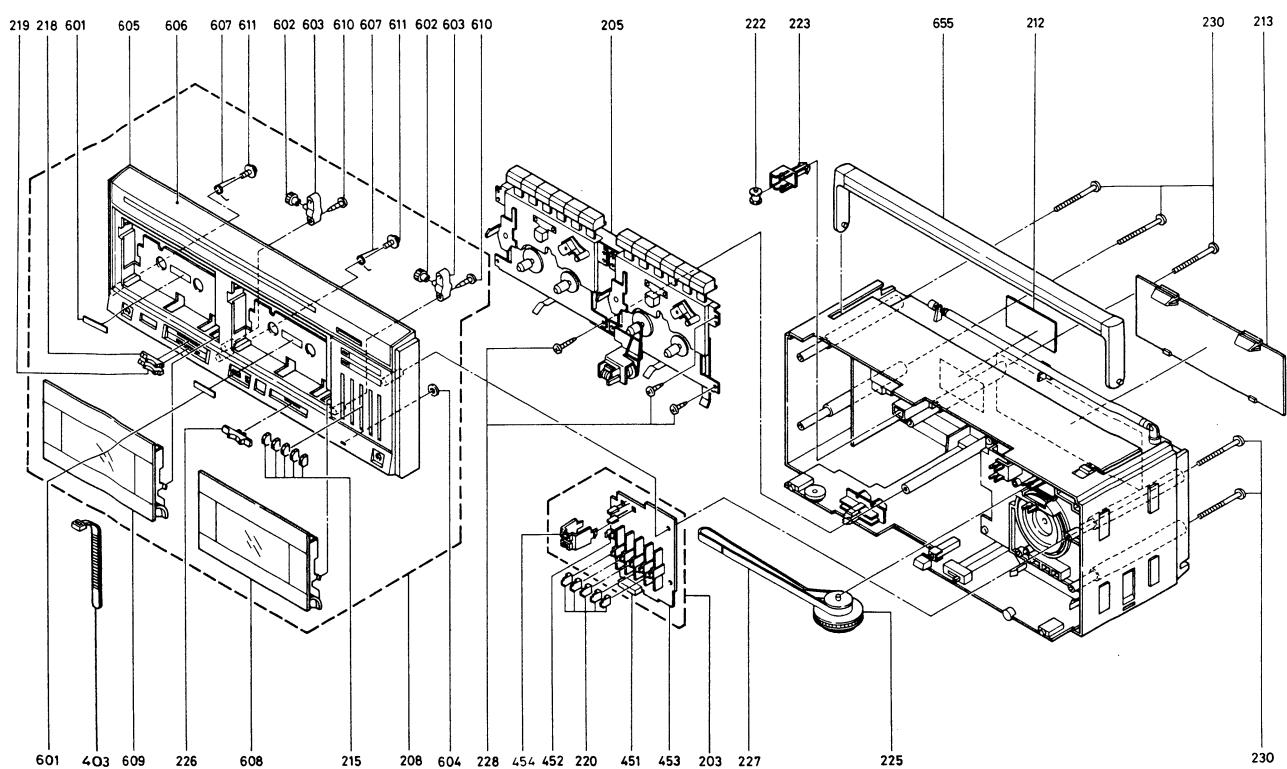
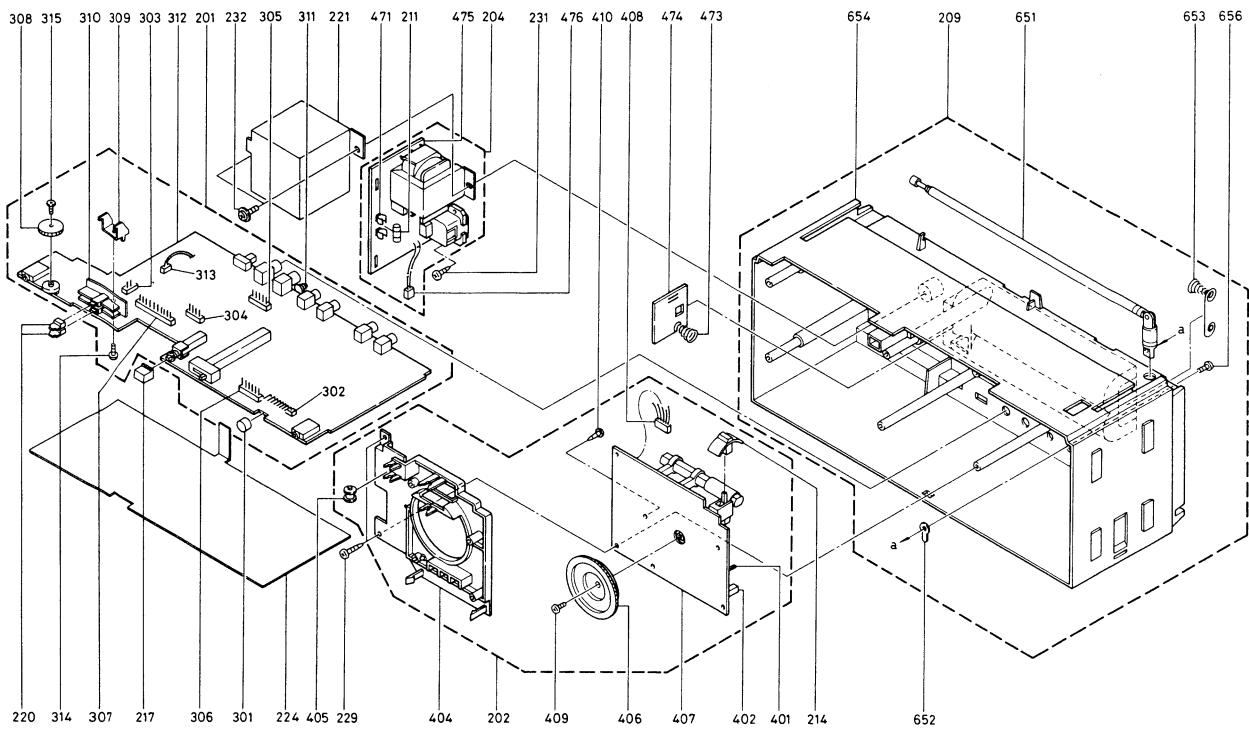
VOLUME P.C. BOARD

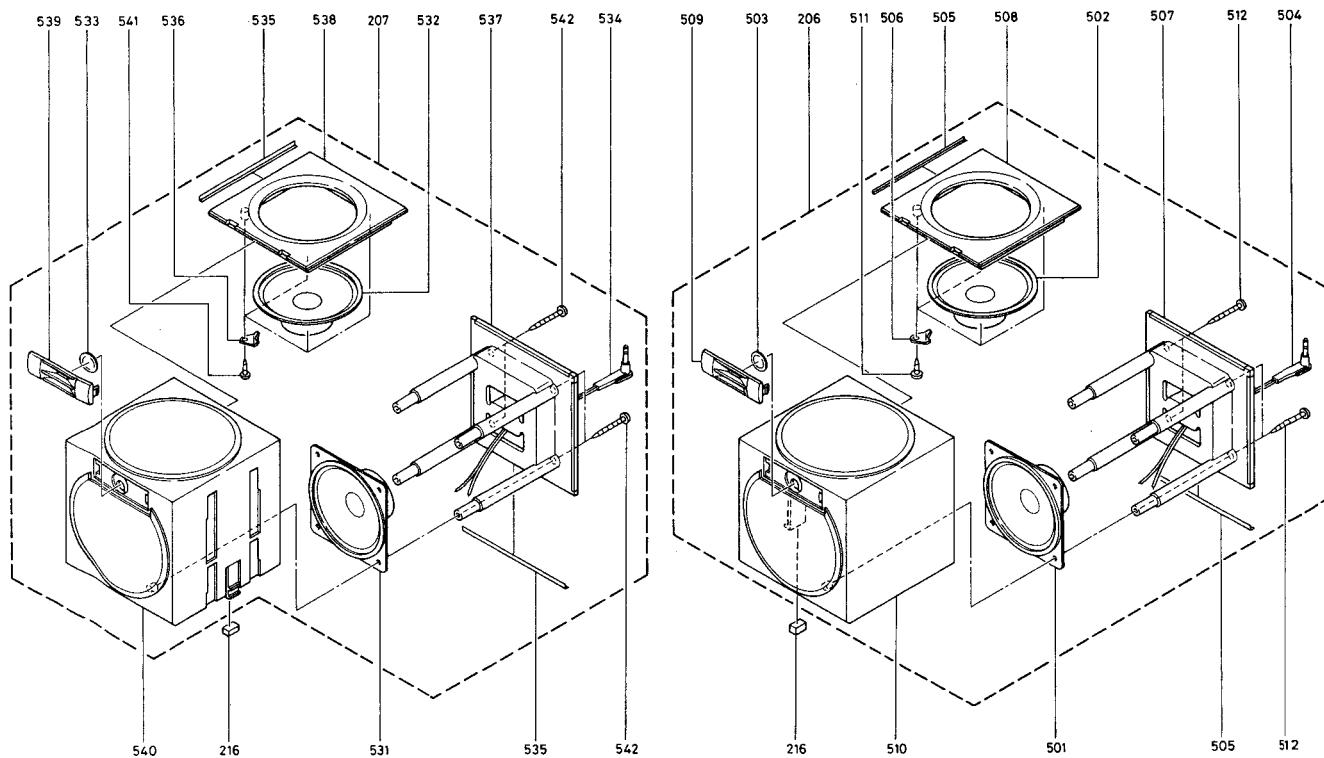


POWER SUPPLY P.C. BOARD

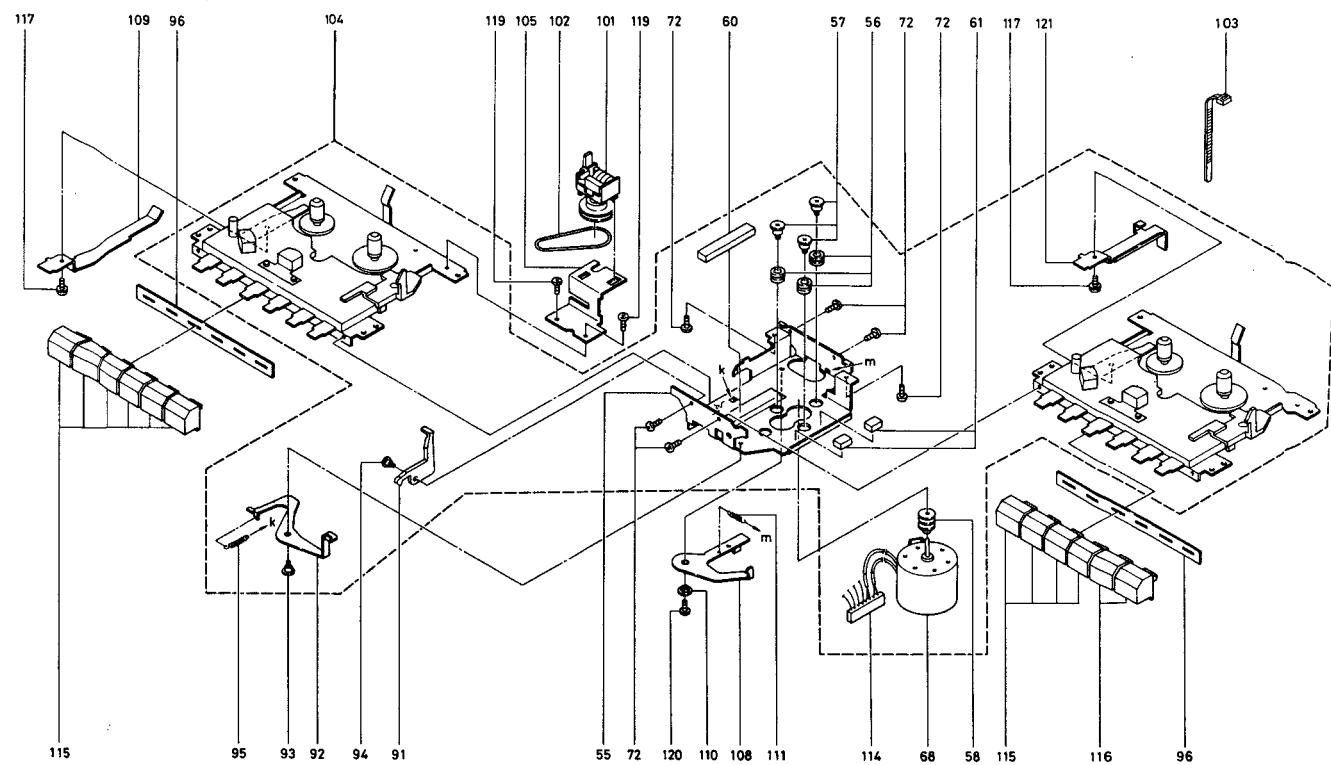


GENERAL UNIT EXPLODED VIEW

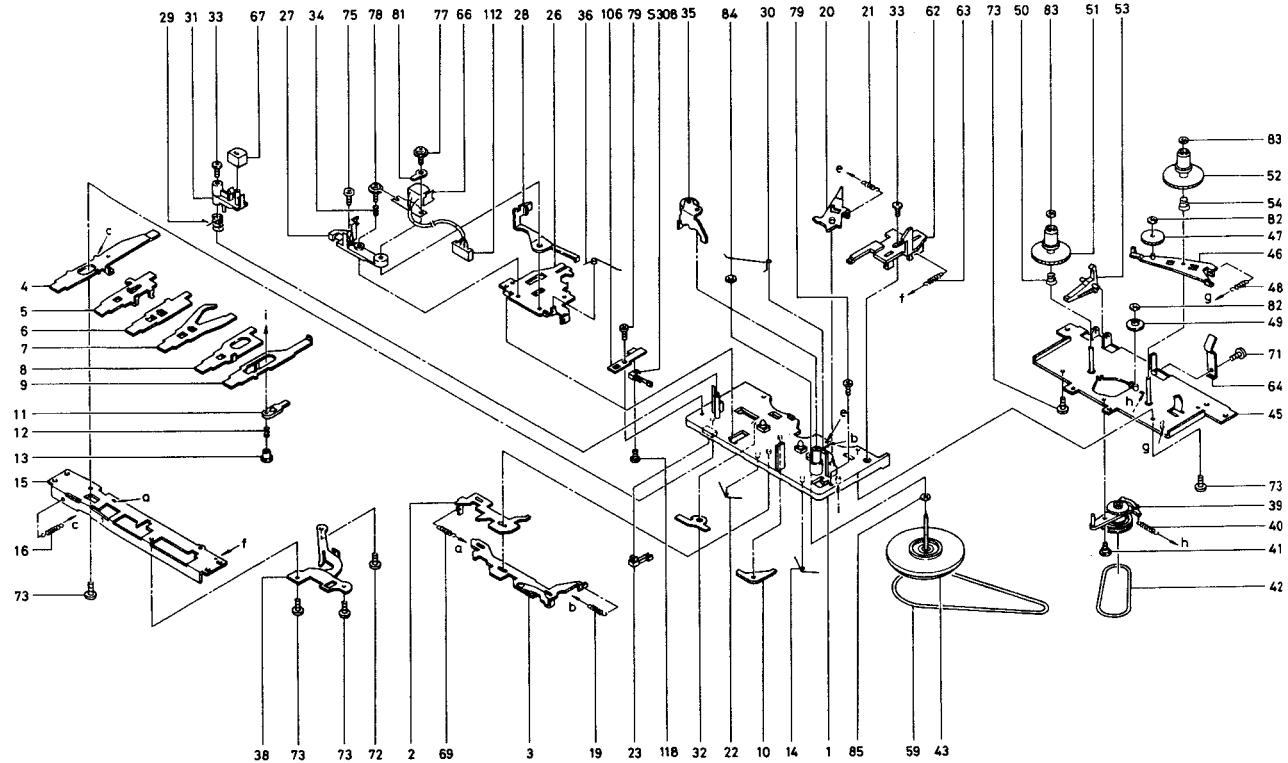




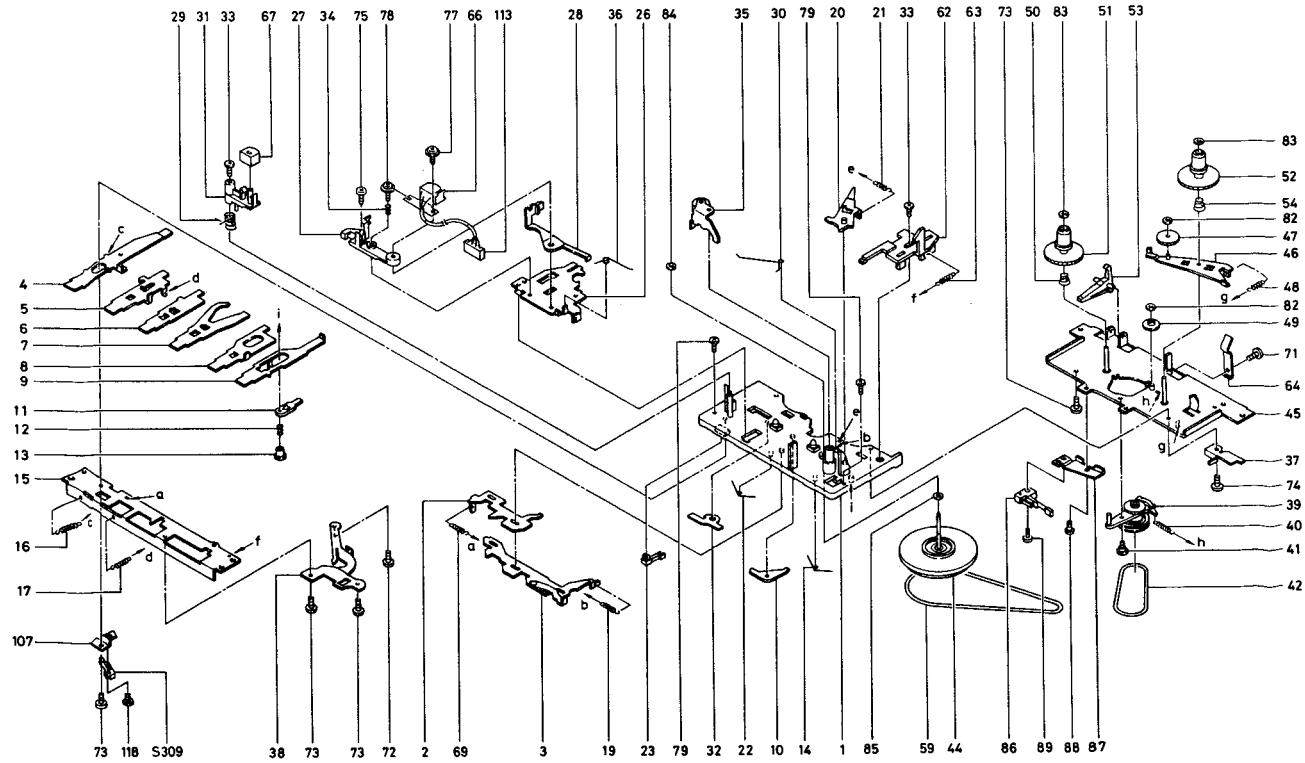
CASSETTE TAPE RECORDER EXPLODED VIEW



CASSETTE 1



CASSETTE 2



REPLACEMENT PARTS LIST

Note: The components identified by  mark are critical for safety.
Replace only with part number specified.

MODEL : RM 2670 E

SYMBOL	PARTS NO	DESCRIPTION	QTY		
* * * ICS * * *					
IC 300	IC 301	23936631 IC TA7668BP	2		
IC 303		23936641 IC BA5406	1		
IC 1		23936971 IC TA7358AP	1		
IC 2		23936981 IC TA7640AP	1		
IC 3		23936991 IC TA7343AP	1		
IC 302		23938361 IC BA3822 LS	1		
* * * TRANSISTORS * * *					
Q303		23940026 TR 2SD467 -C	1		
Q1	Q100	Q200	Q300 Q301 Q302	35047216 TR 2SC945 -P	6
* * * DIODES * * *					
D300	D301	D302		23940031 DD 1SS176	3
D1				36050018 VC SD115	1
D2				36901024 VS HV80	1
D400	D401	D402	D403	36902077 DIODE 1N4003	4
D303	D304			36904189 LD TLR208	2
D305				36905051 DZ RD7.5EB1	1
* * * TRANSFORMERS * * *					
T300		23937881 OSC TRANSFORMER	1		
T400		23940049 POWER TRANS (BD ONLY)	1		
T400		23940041 POWER TRANS (BA ONLY)	1		
* * * VARIABLE RESISTORS * * *					
VR1		23936921 SF VOLUME CONTROL	1		
VR100	VR101	VR102	VR103 VR104	23937031 SLIDE VOLUME CONTROL	5
VR300				23937901 VOLUME CONTROL	1
* * * RELAYS & SWITCHES * * *					
S1		23936931 LEVER SWITCH	1		
S303		23938001 PUSH SWITCH	1		
S300	S301	23938011 SLIDE SWITCH	2		
S302		23938141 SLIDE SWITCH	1		
* * * COILS & FILTERS * * *					
BF1		23936941 BAND PASS FILTER	1		
CF1		23936951 CERAMIC FILTER	1		
L300		23937871 COIL	1		
L8		23938201 OSC COIL	1		
CF2		23938241 CERAMIC FILTER	1		
T1		23938291 FM IFT	1		
L7		23938301 OSC COIL	1		
T2		23938311 AF IFT	1		
L3		23938321 FM IFT	1		
L1		23940046 COIL	1		
L2		23940047 OSC COIL	1		

MODEL : RM2670E

SYMBOL	PARTS NO	DESCRIPTION	QTY
* * * ELECTRICAL PARTS & MISCELLANEOUS PARTS * * *			
402	23936821	WIRE POST	1
501 531	23937041	SPEAKER (WOOFER)	2
502 532	23937051	SPEAKER (WOOFER)	2
504 534	23937081	SPEAKER CORD	2
201	23937561	AMP UNIT	1
202	23937571	TUNER UNIT	1
203	23937581	GRAPHIC UNIT	1
204	23937591	POWER SUPPLY UNIT (BD ONLY)	1
204	23940042	POWER SUPPLY UNIT (BA ONLY)	1
208	23937611	CASE UNIT	1
209	23937621	CASE B UNIT	1
301	23937891	CONDENSER MIC SET	1
J302	23937911	MINI JACK 3.5	1
J301	23937921	MINI JACK 3.5	1
J102 J103 J202 J203	23937931	MINI JACK 3.5	4
J101	23937941	PIN JACK	1
J201	23937951	PIN JACK	1
J401 	23940048	AC SOCKET	1
303	23937961	CONNECTOR PIN (2PIN)	1
304	23937971	CONNECTOR PIN (4PIN)	2
305	23937981	CONNECTOR PIN (5PIN)	1
476	23938171	WIRE CONNECTOR PIN (2PIN)	1
L5	23938211	BAR ANTENNA	1
VC1	23938221	POLY-VARICON	1
TC3 TC5	23938231	TRIMMER CAPACITOR	2
404	23938261	TUNER CHASSIS	1
408	23938281	WIRE CONNECTOR PIN (5PIN)	1
451	23938341	CONNECTOR PIN (8PIN)	1
452	23938351	FUSE HOLDER	1
112	23938551	WIRE CONNECTOR (4PIN)	1
113	23938561	WIRE CONNECTOR (4PIN)	1
302	23938571	CONNECTOR PIN (8PIN)	1
651	23938611	ROD ANTENNA	1
* * * APPEARANCE PARTS * * *			
540	23937081	SPEAKER BOX L SET	1
602	23937261	GEAR	1
206	23937541	SPEAKER BOX R UNIT	1
207	23937551	SPEAKER BOX L UNIT	1
205	23937601	MECHA UNIT	1
315	23937661	SCREW P1735SBK (CAMERA)	1
228 410	23937671	TP3 x 10 -SN-A (SCREW)	6
229	23937681	TP3 x 20 -SN-A (SCREW)	1
222	23937711	PULLEY	1
223	23937721	PULLEY BASE	1

MODEL : RM 2670 E

SYMBOL	PARTS NO	DESCRIPTION	QTY
224	23937731	SHIELD PLATE	1
227	23937761	POINTER BELT	1
655	23937801	HANDLE SET	1
506	23937821	SPEAKER STOPPER A	4
510	23937831	SPEAKER BOX R SET	1
507 537	23937841	SPEAKER BOX COVER	2
508 538	23937851	SPEAKER BOARD	2
473	23938151	COM SPRING	1
409	23938251	P 2.6 x 6 x SN-S (SCREW)	1
406	23938271	VARICON GEAR	1
610	23938381	TP3 x 16 -SN-A (SCREW)	2
605	23938391	CASE SET	1
606	23938401	DIAL PLATE	1
607	23938411	SPL SPRING	2
608	23938421	UP CASE	1
609	23938431	UP CASE	1
101	23938441	TAPE COUNTER	1
102	23938451	COUNTER BELT	1
117	23938461	P 2 x 3 -SK-S	1
119	23938471	DT SCREW P 2004SK	2
120	23938481	DT SCREW P 2606SK	1
104	23938491	MECHA SET	1
105	23938501	COUNTER BASE	1
108	23938511	REC ARM	1
110	23938531	COLLAR	1
111	23938541	EXT SPRING	1
542	23938621	TP3 x 35 -SN-A (SCREW)	4
* * * KNOBS & PUSH BUTTONS * * *			
218	23936441	VOLUME KNOB A	1
219	23936451	VOLUME KNOB B	1
308	23937641	VOLUME KNOB	1
215	23937651	GRAPHIC KNOB	5
217	23937701	SWITCH KNOB	1
225	23937741	TUNING KNOB	1
226	23937751	SWITCH KNOB	1
115	23938581	PUSH BUTTON A	10
116	23938591	PUSH BUTTON B	2
* * * PRINTED & PACKING MATERIALS * * *			
	23937771	INSTRUCTION (BD ONLY)	1
	23940044	INSTRUCTION (BA ONLY)	1

MODEL : RM 2670 E

SYMBOL	PARTS NO	DESCRIPTION				QTY
* * * RESISTORS * * *						
R129 R229	40105117	R, CARBON	4.7H	5%	1/6W	2
R315	40105125	R, CARBON	10H	5%	1/6W	1
R2 R308 R313	40105133	R, CARBON	22H	5%	1/6W	3
R102 R111 R202 R211	40105139	R, CARBON	39H	5%	1/6W	4
R100 R101 R200 R201 R312	40105149	R, CARBON	100H	5%	1/6W	5
R13	40105151	R, CARBON	120H	5%	1/6W	1
R128 R228	40105155	R, CARBON	180H	5%	1/6W	2
R6 R130 R230 R243	40105157	R, CARBON	220H	5%	1/6W	4
R319	40105153	R, CARBON	150H	5%	1/6W	1
R318	40105161	R, CARBON	330H	5%	1/6W	1
R306 R320	40105163	R, CARBON	390H	5%	1/6W	2
R311	40105165	R, CARBON	470H	5%	1/6W	1
R4	40105167	R, CARBON	560H	5%	1/6W	1
R17 R25 R125 R127 R133 R134	40105173	R, CARBON	1K	5%	1/6W	20
R135 R136 R139 R225 R227 R233						
R234 R235 R236 R239 R300 R310						
R324 R326						
R132 R232	40105175	R, CARBON	1.2K	5%	1/6W	2
R19 R137 R237	40105179	R, CARBON	1.8K	5%	1/6W	3
R1 R9 R21 R22 R126 R142	40105181	R, CARBON	2.2K	5%	1/6W	12
R226 R242 R303 R304 R322 R325						
R11 R16 R26 R105 R114 R205	40105189	R, CARBON	4.7K	5%	1/6W	7
R214						
R104 R113 R204 R213	40105191	R, CARBON	5.6K	5%	1/6W	4
R119 R120 R219 R220	40105193	R, CARBON	6.8K	5%	1/6W	4
R18 R140 R141 R240 R241 R309	40105197	R, CARBON	10K	5%	1/6W	6
R108 R117 R208 R217	40105199	R, CARBON	12K	5%	1/6W	4
R314	40105201	R, CARBON	15K	5%	1/6W	1
R109 R118 R209 R218	40105203	R, CARBON	18K	5%	1/6W	4
R106 R115 R121 R122 R123 R206	40105205	R, CARBON	22K	5%	1/6W	10
R215 R221 R222 R223						
R23 R24	40105211	R, CARBON	3.9K	5%	1/6W	2
R131 R138 R231 R238	40105213	R, CARBON	47K	5%	1/6W	4
R110 R210	40105217	R, CARBON	68K	5%	1/6W	2
R10 R12	40105221	R, CARBON	100K	5%	1/6W	2
R20	40105225	R, CARBON	150K	5%	1/6W	1
R103 R107 R112 R116 R203 R207	40105227	R, CARBON	180K	5%	1/6W	8
R212 R216						
R124 R224 R307	40105233	R, CARBON	330K	5%	1/6W	3
R301 R323	40105253	R, CARBON	2200K	5%	1/6W	2
R321 A	40809767	R, FUSE	4.7H	5%	1/4W	1
R7 R15	40913157	R, CARBON	220H	5%	1/4W	2
R3 R5 R14	40913221	R, CARBON	100K	5%	1/4W	3
R302 R305	40982169	R, CARBON	68H	5%	1/6W	2
R143	40982757	R, CARBON	220H	5%	1/4W	1

MODEL : RM 2670 E

SYMBOL	PARTS NO	DESCRIPTION				QTY
* * * CAPACITORS * * *						
C21	421 B1005	C, CERAMIC	50 V	220PF		1
C31	421 B1018	C, CERAMIC	50 V	820PF		1
C105 C114 C205 C214	421 C0205	C, CERAMIC	50 V	220PF		4
C319	421 C0209	C, CERAMIC	50 V	470PF		1
C2	42110413	C, CERAMIC	50 V	1000PF		1
C9	42110425	C, CERAMIC	50 V	0.01UF		1
C4 C10 C14 C15 C16 C17 C19	42110429	C, CERAMIC	50 V	0.022UF		12
C43 C400 C401 C402 C403	42331004	C, CERAMIC	50 V	4PF		1
C8	42331005	C, CERAMIC	50 V	5PF		1
C5	42331013	C, CERAMIC	50 V	8PF		1
C28	42331015	C, CERAMIC	50 V	10PF		2
C24 C25	42331027	C, CERAMIC	50 V	18PF		1
C26	42331029	C, CERAMIC	50 V	22PF		3
C1 C3 C7	42334028	C, CERAMIC	50 V	20PF		1
C6	4297 F702	C, FILM	50 V	1200PF		2
C38 C39	4297 F717	C, FILM	50 V	0.022UF		2
C27	42972413	C, FILM	50 V	330PF		1
C34	42972425	C, FILM	50 V	1000PF		1
C29	42972437	C, FILM	50 V	3300PF		1
C324	42978019	C, FILM	50 V	2700PF		1
C142 C242	42978065	C, FILM	50 V	0.22UF		2
C132 C232	43018342	C, ELEC	50 V	0.1UF		2
C134 C234	43018345	C, ELEC	50 V	0.33UF		2
C136 C236	43018348	C, ELEC	50 V	1UF		2
C312	4302 C031	C, ELEC	10 V	220UF		1
C42	4302 E034	C, ELEC	10 V	1000UF		1
C126 C127 C128 C226 C227 C228	4302 E105	C, ELEC	50 V	4.7UF		6
C33	43050107	C, ELEC	25 V	3.3UF		1
C37	43050108	C, ELEC	25 V	4.7UF		1
C13 C32	4309J083	C, ELEC	50 V	1UF		2
C11 C18 C30 C40 C41	43313022	C, ELEC	16 V	10UF		5
C20	43313031	C, ELEC	10 V	22UF		1
C103 C112 C140 C143 C203 C212	43911003	C, ELEC	10 V	47UF		13
C240 C243 C302 C305 C315 C329	C331					
C308 C309 C323	43911004	C, ELEC	10 V	100UF		3
C303 C304 C306 C307 C318 C320	43911005	C, ELEC	10 V	220UF		6
C141 C241	43911008	C, ELEC	10 V	1000UF		2
C313	43911015	C, ELEC	16 V	100UF		1
C327	43911016	C, ELEC	16 V	220UF		1
C101 C110 C118 C121 C123 C125	43911046	C, ELEC	50 V	1UF		16
C138 C201 C210 C218 C221 C223						
C225 C238 C310 C311						
C106 C115 C206 C215 C300 C301	43911048	C, ELEC	50 V	0.1UF		6
C314 C317	43911427	C, ELEC	16 V	2200UF		2

MECHANISM PARTS LIST

MODEL : RM 2670 E

SYMBOL	PARTS NO	DESCRIPTION	QTY
* * * MECHANICAL PARTS * * *			
1	23938631	MAIN BASE ASSY	2
2	23938641	SWITCH PLATE	2
3	23938651	PUSH BUTTON ACTUATOR	2
4	23938661	REC BUTTON LEVER	2
5	23938671	PLAY BUTTON LEVER	2
6	23938681	RWD BUTTON LEVER	2
7	23938691	FF BUTTON LEVER	2
8	23938701	STOP BUTTON LEVER	2
9	23938711	PAUSE BUTTON LEVER ASSY	2
10	23938721	RWD LEVER	2
11	23938731	PAUSE LEVER	2
12	23938741	PAUSE LEVER SPRING	2
13	23938751	PAUSE STOPPER	2
14	23938761	BUTTON LEVER SPRING (C)	2
15	23938771	SUB PLATE	2
16	23938781	BUTTON LEVER SPRING (A)	1
17	23938791	PLAY BUTTON LEVER SP (S)	1
19	23938801	ACTUATOR SPRING	2
20	23938811	AUTO LEVER	2
21	23938821	AUTO LEVER SPRING	2
22	23938831	BUTTON LEVER SPRING (B)	2
23	23938841	LEAF SWITCH	2
26	23938851	HEAD PANEL	2
27	23938861	HEAD BASE	2
28	23938871	SENSING PLATE ASSY	2
30	23938881	HEAD PANEL SPRING (S)	2
31	23938891	MG ARM	2
32	23938901	P. R STOPPER	2
33	23938911	P. M. E SCREW	2
34	23938921	SPRING	2
35	23938931	PINCH ROLLER ARM ASSY	2
36	23938941	PINCH ROLLER SPRING	2
37	23938951	PAUSE PROTECTION BRACKET	1
38	23938961	METAL GUIDE	2
39	23938971	RF PULLEY ARM ASSY	2
40	23938981	RF PULLEY ARM SPRING	2
41	23938991	RF ARM COLLER SCREW	2
42	23939001	RF BELT	2
43	23939011	FLY WHEEL ASSY	1
44	23939021	FLY WHEEL ASSY	1
45	23939031	REEL BASE ASSY	2
46	23939041	TAKE UP PLATE ASSY	2
47	23939051	TAKE UP GEAR	2
48	23939061	T. G PLATE SPRING	2
49	23939071	FF GEAR	2

MODEL : RM2670E

SYMBOL	PARTS NO	DESCRIPTION	QTY
50	23939081	BACK TENSION SPRING	2
51	23939091	SUPPLY REEL ASSY	2
52	23939101	TAKE UP REEL ASSY	2
53	23939111	RECORD SAFETY LEVER	2
54	23939121	BACK TENSION SPRING	2
55	23939131	MOTOR BRACKET	1
56	23939141	MOTOR RUBBER	3
57	23939151	COLLER SCREW	3
58	23939161	MOTOR PULLEY	1
59	23939171	MAIN BELT	2
60	23939181	ANTI VIBRATION FELT MAT	1
61	23939191	ANTI VIBRATION FELT MAT	2
62	23939201	EJECT SLIDE LEVER	2
63	23939211	EJECT SLIDE LEVER SP	2
64	23939221	PACK SPRING	2
66	23939231	R. P. HEAD	2
67	23939241	E. HEAD	2
68	23939251	MOTOR	1
69	23939261	SWITCH ACTUATOR SPRING	2
71	23939271	C TAPPING SCREW M2 x 3	2
72	23939281	C TAPPING SCREW M2 x 4	8
73	23939291	P TAPPING BIND SCREW M2 x 5	9
74	23939301	P TAPPING SCREW M2 x 6	1
75	23939311	SCREW M2 x 6	2
77	23939321	(+) (-) CAP SCREW M2 x 7	2
78	23939331	AZIMUTH SCREW	2
81	23939351	LUG PLATE 3B	1
82	23939361	P. WASHER CUT 1.2 x 3 x 0.25	4
83	23939371	P. WASHER CUT 1.2 x 3 x 0.4	4
84	23939381	P. WASHER CUT 1.55 x 3.8 x 0.5	2
85	23939391	P. WASHER 2.05 x 4 x 0.4	2
91	23939441	P KICK LEVER (B)	1
92	23939451	P KICK LEVER (A)	1
93	23939461	P. K. COLLAR SCREW (A)	1
94	23939471	P. K. COLLAR SCREW (B)	1
95	23939481	P. KICK LEVER SPRING	1

**SER NO. 4253
1.1A 8609**

Printed in Japan

02317415